Date: Tuesday, 4/24/2007 3:23:54 PM
User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	**Drawing Name**	: DUCT
Job Number	: 32049		
Estimate Number	: 12315		
P.O. Number	: N/A	**Part Number**	: D34731
This Issue	: 4/24/2007 **S.O. No.** : N/A	**Drawing Number**	: D3473 REV B
Prsht Rev.	: NC	**Project Number**	: N/A
First Issue	: N/A **Type** : SMALL /MED FAB	**Drawing Revision**	: B
Previous Run	: 27017	**Material**	: N/A
Written By	:	**Due Date**	: 5/8/2007 **Qty:** 2 **Um:** Each
Checked & Approved By	: 07.04.25		
Comment	: Est Rev:A New Issue 06-03-02 JLM Est Rev:B As per Rev B 06-05-24 JLM		

Additional Product

Job Number:

Seq. #:	Machine Or Operation:	Description :
1.0	M304S26GA	304/316 0.018 SHEET

Comment: Qty.: 0.6305 sf(s)/Unit Total : 1.2611 sf(s)
304/316 0.018 SHEET
Batch: M103678 ml 07 04 26 (2)

Seq. #:	Machine Or Operation:	Description :
2.0	WATER JET	FLOW WATER JET

Comment: FLOW WATER JET
Cut as per Dwg D3473
Dwg Rev: B
Prog Rev: B
ml 07 04 26 (2)

Seq. #:	Machine Or Operation:	Description :
3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE

ml 07 04 26 (2)

Comment: INSPECT PARTS AS THEY COME OFF MACHINE

Seq. #:	Machine Or Operation:	Description :
4.0	QC8	SECOND CHECK

Comment: SECOND CHECK 07.04.30 (2)

Seq. #:	Machine Or Operation:	Description :
5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1

Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Deburr if necessary.

2-Roll as per Dwg D3473

3-Form Small Flange as per Dwg D3473 using DT8861 Base & Dt8847B Male Die

07.04.30 (2)

Form: rprocess

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ________ PAR #: ______ Fault Category: ________ NCR: Yes (No) DQA: [signature] Date: 07/05/02

QA: N/C Closed: _____ Date: _________

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
				11103PJ8		[signature]		

NOTE: Date & initial all entries

Date: Tuesday, 4/24/2007 3:23:54 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services
Drawing Name: DUCT

Job Number: 32049
Part Number: D34731

Job Number:

Seq. #:	Machine Or Operation:	Description :
	4-Form Large Flange as per Dwg D3473 Using DT8862 5-Spot Weld as per Dwg 3473	07.04.30 (2)
6.0	QC11	VISUAL INSPECTION OF SPOT WELDING
	Comment: VISUAL INSPECTION OF SPOT WELDING	SB 07/04/30 (2)
7.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment: INSPECT WORK TO CURRENT STEP	SB 07/04/30 (2)
8.0	PACKAGING 1	PACKAGING RESOURCE #1
	Comment: PACKAGING RESOURCE #1 Identify and Stock Location: G A	SB 07/04/30 (2)
9.0	QC21	FINAL INSPECTION/W/O RELEASE (2)
	Comment: FINAL INSPECTION/W/O RELEASE	07/05/02

Job Completion

07.05.02

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________ **PAR #:** ______ **Fault Category:** ____________ **NCR:** Yes No **DQA:** _____ **Date:** ________

QA: N/C Closed: _____ **Date:** ________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	32049
Description: Duct	Part Number:	D3473-1
Inspection Dwg: D3473 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

[X] First Article [ ] Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
19.220	+/-0.010	19.220	✓		measuring tape	
4.500	+/-0.010	4.500	✓		vern	
3.808	+/-0.010	3.798	✓		vern	
4.600	+/-0.010	4.602	✓		vern	
2.250	+/-0.010	2.245	✓		vern	
1.930	+/-0.010	1.931	✓		vern	
2.341	+/-0.010	2.342	✓		vern	
2.040	+/-0.010	2.042	✓		vern	
2.416	+/-0.010	2.417	✓		vern	

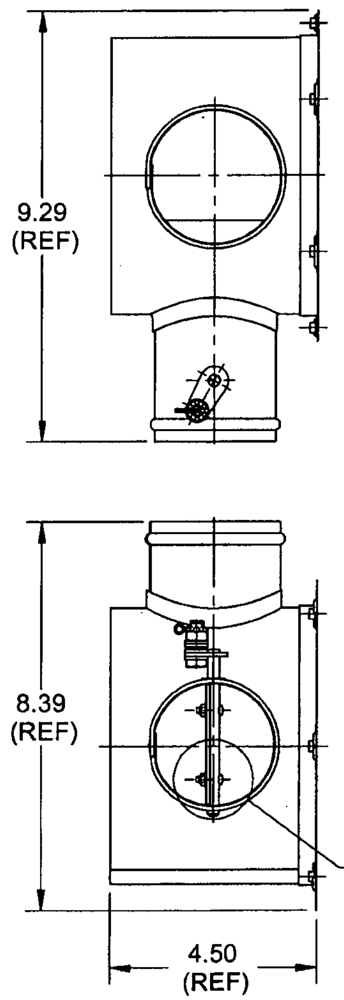
Measured by:	MM	Audited by:		Prototype Approval:	N/A
Date:	07 04 26	Date:		Date:	N/A

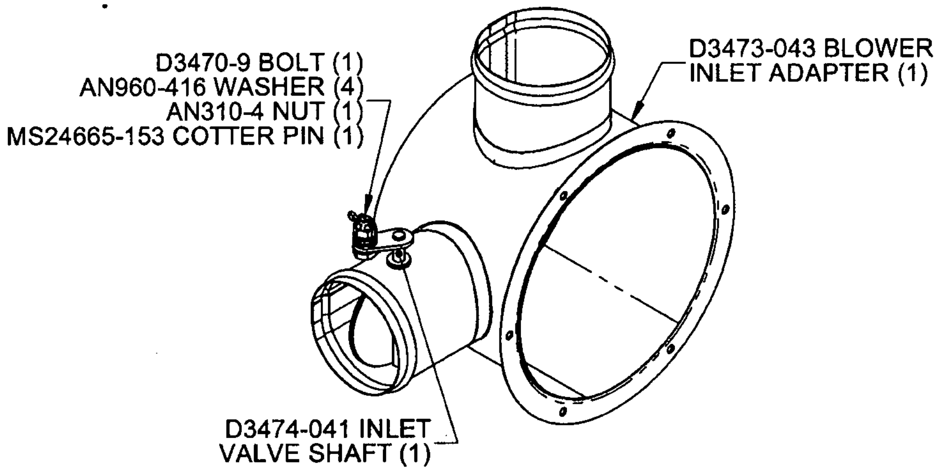
Rev	Date	Change	Revised by	Approved
A	06.06.14	New Issue	KJ/JLM	[signature]

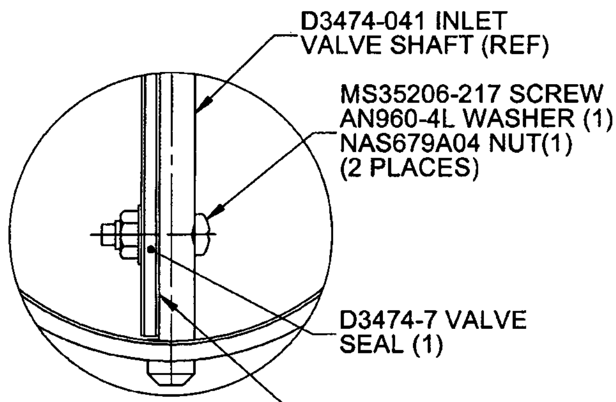
DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3473 — REV. B — SHEET 1 OF 7
DATE 06.05.16		TITLE BLOWER INLET ADAPTER — SCALE 1:4

REV	DATE	DESCRIPTION
A	06.02.07	NEW ISSUE
B	06.05.16	D3473-5F/-7F: 9.750 & 8.810 WERE 9.60 & 8.60

RELEASED 06.05.16







DETAIL A
SCALE 1 : 1

QTY -041	P/N	DESCRIPTION
X	**D3473-041**	**BLOWER INLET ADAPTER**
1	D3470-9	BOLT
1	D3471-043	BLOWER INLET WELDMENT
1	D3474-041	INLET VALVE SHAFT
2	D3474-5	BUTTERFLY VALVE
1	D3474-7	BUTTERFLY VALVE SEAL
1	AN310-4	NUT
2	AN960-4L	WASHER
4	AN960-416	WASHER
1	MS24665-153	COTTER PIN
2	MS35206-217	SCREW
2	NAS679-A04	NUT

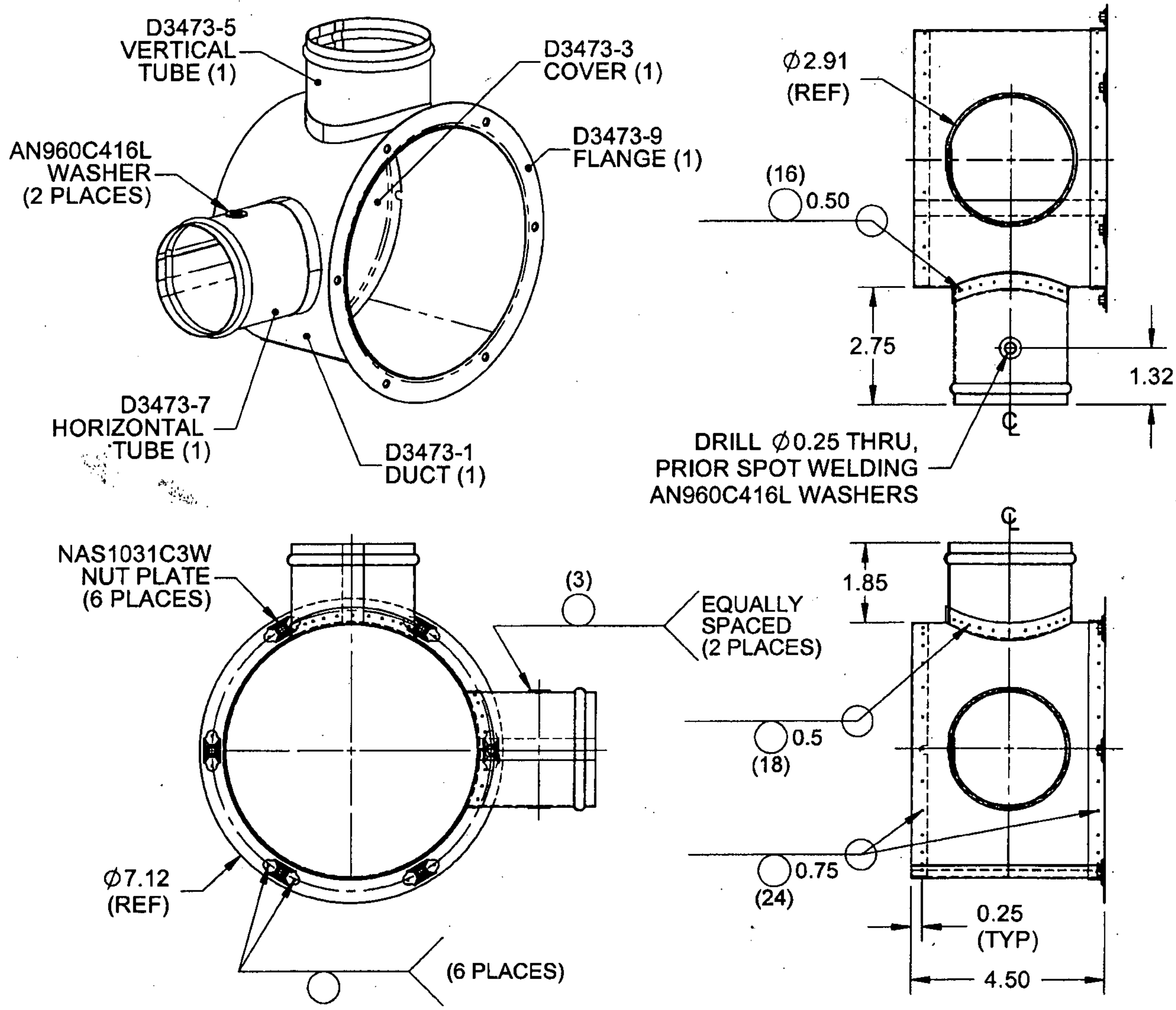
D3473-041 BLOWER INLET ADAPTER

NOTES:

1) IDENTIFY WITH DART P/N D3473-041 USING FINE POINT PERMANENT INK MARKER
2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
3) ALL DIMENSIONS ARE IN INCHES
4) BREAK ALL SHARP EDGES 0.005 TO 0.010

DESIGN	DRAWN BY	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3473 — REV. B — SHEET 2 OF 7
DATE 06.05.16		TITLE BLOWER INLET ADAPTER — SCALE 1:4

DART



QTY -041	P/N	DESCRIPTION
X	D3473-043	BLOWER INLET WELDMENT
1	D3473-1	DUCT
1	D3473-3	COVER
1	D3473-5	VERTICAL TUBE
1	D3473-7	HORIZONTAL TUBE
1	D3473-9	FLANGE
2	AN960C416L	WASHER
6	NAS1031C3W	NUT PLATE

D3473-043 BLOWER INLET WELDMENT

NOTES:

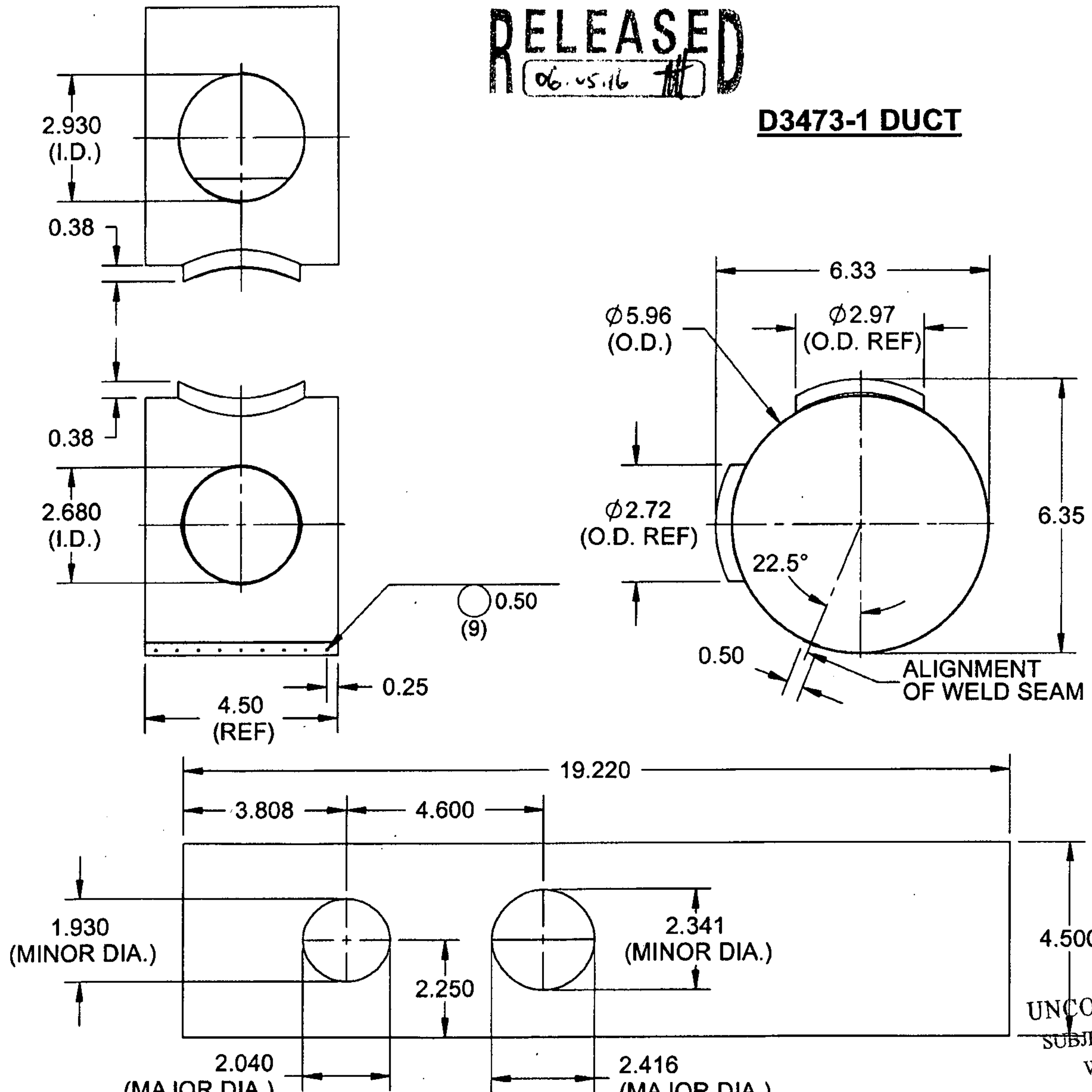
1) SPOT WELD PER DART QSI 004
2) FINISH: NONE
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES
5) BREAK ALL SHARP EDGES 0.005 TO 0.010

DESIGN	DRAWN BY	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3473	REV. B SHEET 3 OF 7
DATE 06.05.16		TITLE BLOWER INLET ADAPTER	SCALE 1:4

DART

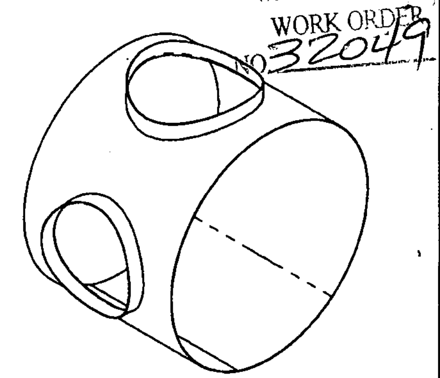
RELEASED 06.05.16

D3473-1 DUCT



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WORK ORDER NO 32049

D3473-1F DUCT FLAT PATTERN

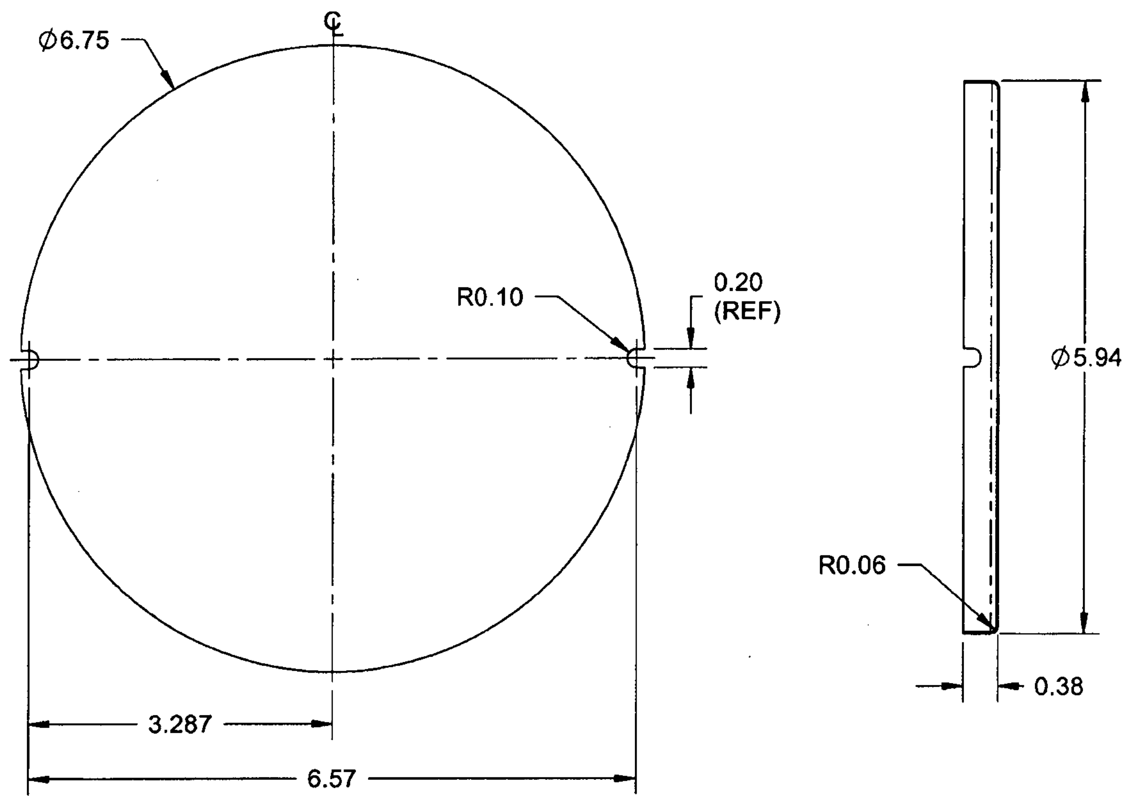


NOTES:

1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED)
   2B FINISH 26 GAUGE SS (0.018 THICK)
2) SPOT WELD PER DART QSI 004
3) FINISH: NONE
4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
6) ALL DIMENSIONS ARE IN INCHES
7) BREAK ALL SHARP EDGES 0.005 TO 0.010

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3473 — REV. B — SHEET 4 OF 7
DATE 06.05.16		TITLE BLOWER INLET ADAPTER — SCALE 1:2

RELEASED 06.05.16



D3473-3F COVER FLAT PATTERN

D3473-3 COVER

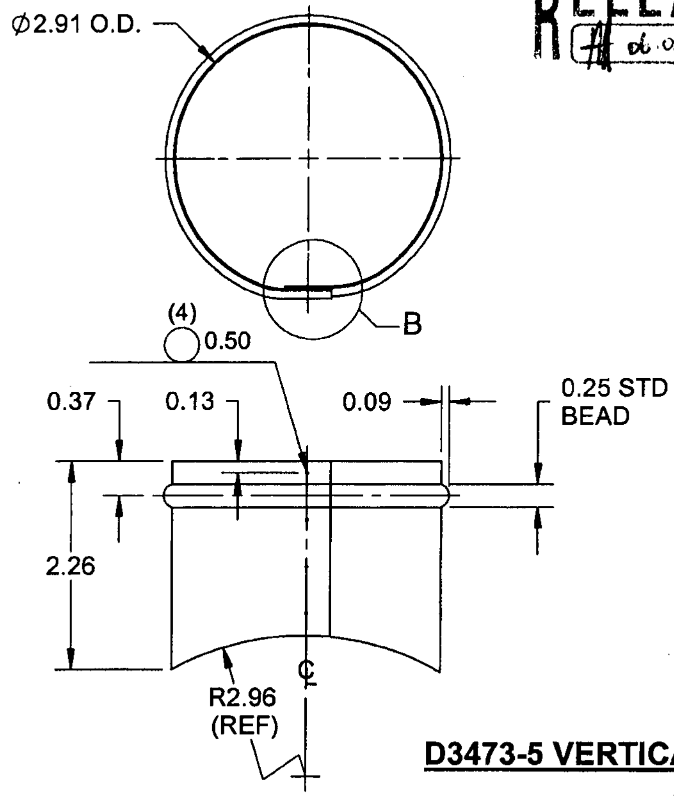
NOTES:

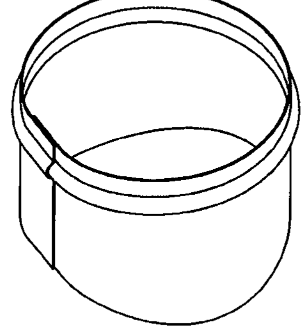
1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH
   26 GAUGE SS (0.018 THICK)
2) PART IS SYMMETRICAL ABOUT CENTERLINE
3) FINISH: NONE
4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
5) ALL DIMENSIONS ARE IN INCHES
6) BREAK ALL SHARP EDGES 0.005 TO 0.010

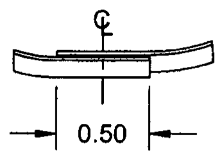
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CHECKED	APPROVED	DRAWING NO. D3473 — REV. B — SHEET 5 OF 7
DATE 06.05.16		TITLE BLOWER INLET ADAPTER — SCALE 1:2

DART

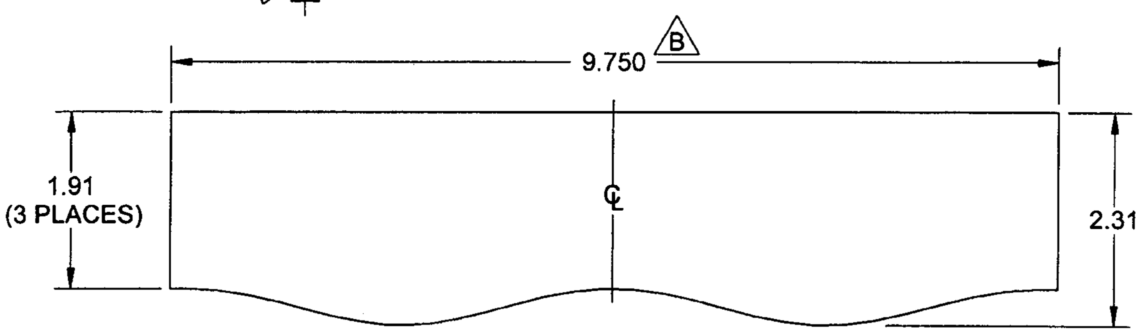






DETAIL B
SCALE 1:1

D3473-5 VERTICAL TUBE



D3473-5F VERTICAL TUBE FLAT PATTERN

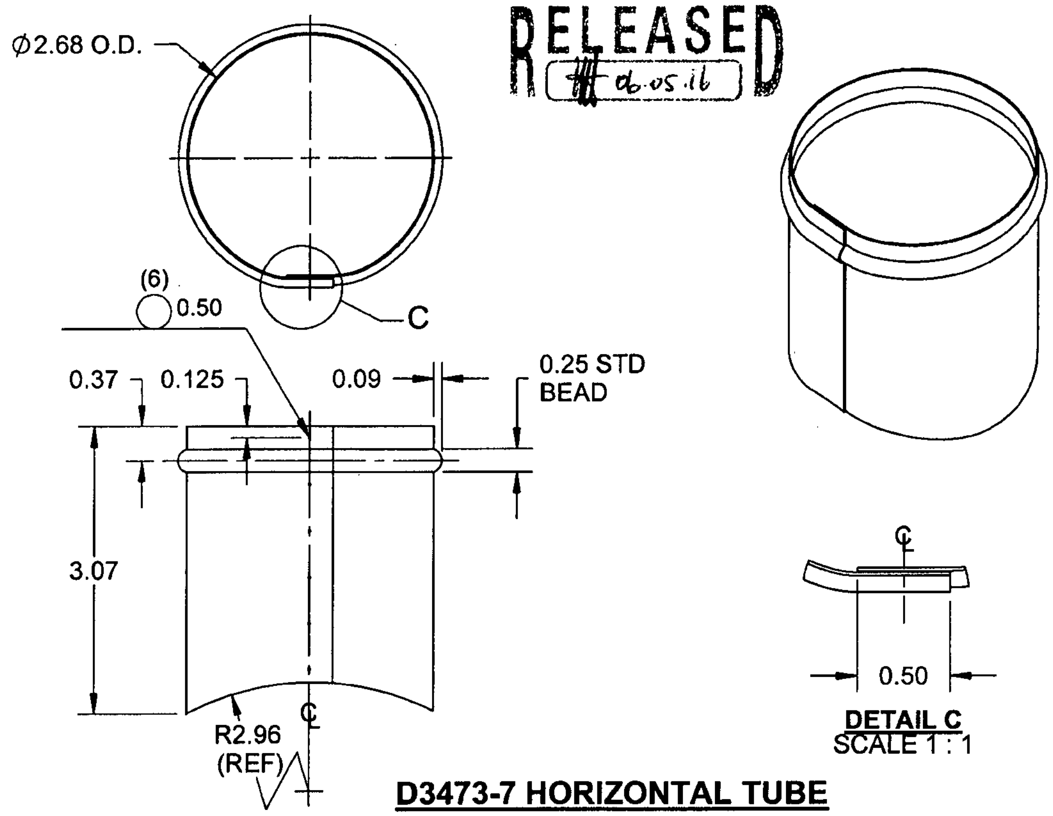
NOTES:

1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH
   26 GAUGE SS (0.018 THICK)
2) SPOT WELD PER DART QSI 004
3) FINISH: NONE
4) FLAT PATTERN IS SYMMETRICAL ABOUT CENTERLINE
5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
6) ALL DIMENSIONS ARE IN INCHES
7) BREAK ALL SHARP EDGES 0.005 TO 0.010

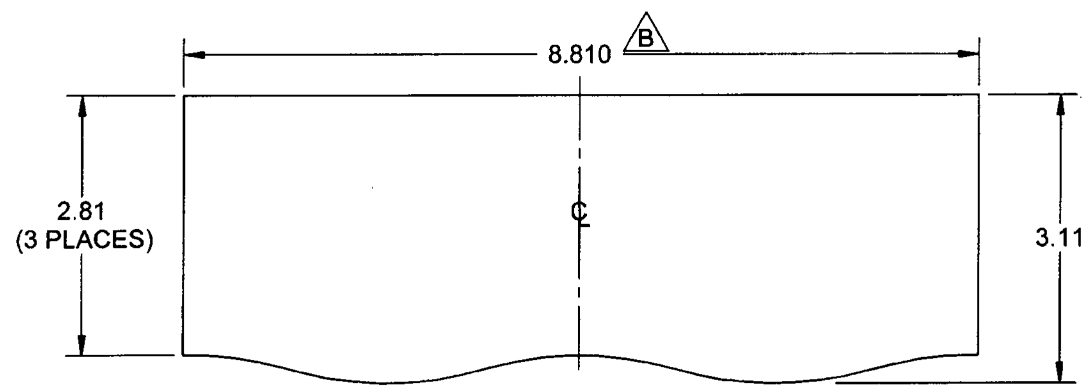
DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3473	REV. B SHEET 6 OF 7
DATE 06.05.16		TITLE BLOWER INLET ADAPTER	SCALE 1:2

RELEASED 06.05.16



D3473-7 HORIZONTAL TUBE



D3473-7F HORIZONTAL TUBE FLAT PATTERN

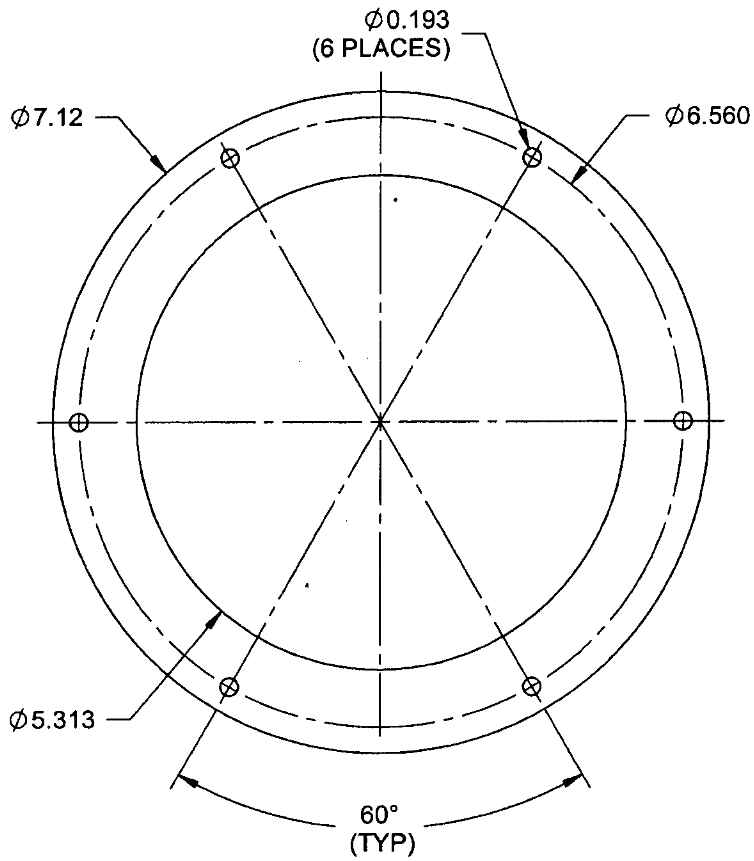
NOTES:

1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH
   26 GAUGE SS (0.018 THICK)
2) SPOT WELD PER DART QSI 004
3) FINISH: NONE
4) FLAT PATTERN IS SYMMETRICAL ABOUT CENTERLINE
5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
6) ALL DIMENSIONS ARE IN INCHES
7) BREAK ALL SHARP EDGES 0.005 TO 0.010

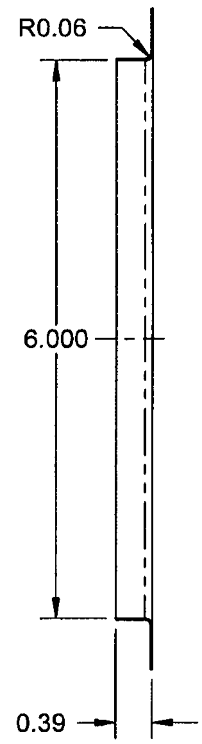
DESIGN	DRAWN BY	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3473 — REV. B — SHEET 7 OF 7
DATE 06.05.16		TITLE BLOWER INLET ADAPTER — SCALE 1:2

DART

RELEASED 06.05.16



D3473-9F FLANGE FLAT PATTERN



D3473-9 FLANGE BENDING DETAIL

NOTES:

1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH
26 GAUGE SS (0.018 THICK) (REF. DART SPEC. M304S26GA)
2) FINISH: NONE
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES
5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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SPOT WELD TEST RECORD
AMS-W-6858A
CLASS ' C '

TEST NO: 9

EMPLOYEE: Dan Stower

PART NUMBER: D3473-1 JOB NUMBER: B32049

MATERIAL TYPE: 304 S MATERIAL THICKNESS: 26 G

GROUP SPECIFICATION: 3

Group 1: Aluminum & magnesium
Group 2: Iron; nickel; cobalt
Group 3: Titanium

TEST RESULTS

	PASS	FAIL	
VISUAL:	[✓]	[ ]	
PENETRATION:	[✓]	[ ]	
PULL STRENGTH:	[✓]	[ ]	PSI Reading: ______

The individual named above has been trained and is qualified in accordance with standard AMS-W-6858A, and QSI 004 (ref: 4.3)

DATE OF TEST COUPON: 07/04/10
QUALIFIER: SB